Attachment 6

Program Preferences

Greater Monterey County IRWM Region

"Addressing an Urgent Water Supply Need for a Disadvantaged Community in the Greater Monterey County IRWM Region"

Project #1: Castroville Water Supply and Water Conservation Project

The project is regional in scope: While providing a long-term water supply source for the community of Castroville (population 7,000), the project will also help increase water supply reliability for the surrounding coastal communities and for agriculture. Seawater intrusion in the 400 Foot Aquifer is primarily a function of overuse; by reducing the draw from the 400 Foot Aquifer, the surrounding region will benefit by a reduction in seawater intrusion. The project meets the following definitions of "Regional Program" in the 2015 IRWM Guidelines: "b. Increase water supplies: water use efficiency" (via water conservation activities); "c. Improve operational efficiency and water supply reliability" (via drilling new well), and "d. Improve water quality, including drinking water treatment and distribution" (via water treatment). Level of certainty: High. Breadth/magnitude: High.

The project effectively resolves significant water-related conflicts: The agricultural community and urban community currently draw water from the same aquifer and, as evidenced by seawater intrusion, the aquifer is being overused. This project will help resolve a conflict of use by drawing water from a different aquifer (1400 Foot) for the Castroville Community Service District's water supply and reducing drawdown of the 400 Foot Aquifer by 785 AFY. Level of certainty: High. Breadth/magnitude: Moderate.

The project addresses critical water supply or water quality needs of disadvantaged communities: According to ACS 2009-2013 data, the Castroville Community Service District is 44% DAC (the entire community is low income, and was designated a DAC up through ACS 2007-2011). Seawater intrusion poses an imminent threat to the community's water supply. Without this project, the District will be forced to raise water rates sharply, and may need to truck in bottled water for its 7,000 customers within the year. The project will address this critical need by supplying a new source of water that is not known to be vulnerable to seawater intrusion, significantly improving long-term water supply reliability. The project therefore meets the following definition of critical water supply/water quality need of a DAC: "Infrastructure renovations to a public water supply system necessary to assure continued reliability of the minimum quality and quantity of water." The project also addresses the Human Right to Water Policy by ensuring the provision of clean, affordable, and accessible water for human consumption, cooking, and sanitary purposes. Level of certainty: High. Breadth/magnitude: High.

Drought Preparedness: This project will create long-term, sustainable water supply for a community threatened by seawater intrusion, which has been exacerbated by drought impacts. The ample supply of water in the Deep Aquifer, along with the water conservation activities implemented through this project, will protect the community from future impacts of drought. Level of certainty: High. Breadth/magnitude: High.

Use and Reuse Water More Efficiently: This project will implement water conservation activities in order to help meet future water demands and increase water supply reliability such as educational outreach, toilet rebates, lawn removal/Astroturf rebates and high efficiency washers. Level of certainty: High. Breadth/magnitude: Moderate.

Climate Change Response Actions: Seawater intrusion in the 400 Foot Aquifer is caused primarily by groundwater pumping, but is predicted to be worsened by sea level rise due to climate change.[1] The project will help reduce seawater intrusion by ceasing to draw water from that aquifer (i.e., reducing overall groundwater pumping from that aquifer), and will help protect the community from climate change impacts by providing water from a source that is less susceptible to climate change impacts. Level of certainty: High. Breadth/magnitude: High.

Protect Surface Water and Groundwater Quality: This project will improve groundwater quality and provide a more secure supply for beneficial uses (including agricultural irrigation use in the coastal region) by reducing draw from the 400 Foot Aquifer, thereby helping to reduce the rate of seawater intrusion. Level of certainty: High. Breadth/magnitude: Moderate.

Ensure Equitable Distribution of Benefits: This project will prevent the imminent disruption of water service to a DAC. The project will thereby "address safe drinking water needs" of a DAC and will accomplish the Human Right to Water Policy. Level of certainty: High. Breadth/magnitude: High.

[1] Sea Water Intrusion by Sea-Level Rise: Scenarios for the 21st Century by Hugo A. Loaiciga ´, Thomas J. Pingel, and Elizabeth S. Garcia, GROUND WATER, Vol. 50, No. 1, January-February 2012 (pages 37–47). See page 46.